AQA Mathematics for GCSE

Module 5 – Higher

Area, Perimeter and Volume- Learn 1,2,3,4

Vocabulary:

- Polygon – A closed two-dimensional shape made from straight lines
- Quadrilateral – A polygon with for sides
- Area – The amount of enclosed space inside a shape
- Perimeter – The distance around an enclosed shape
- Face – The flat surfaces of a solid
- Vertex (pl. vertices) – The point where two or more edges meet
- Edge – A line segment that joins two vertices of a solid
- Cross Section – A cut at right angles to a face and usually at right angles to the length of a prism
- Prism – A three dimensional solid with two cross-sectional faces that are identical polygons, parallel each other
- Volume – A measure of how much space fills a solid

Learn 1 - Perimeters and Areas of Tringles and Perimeters

To find the perimeter of any shape you add all the lengths of all the sides together.
To find the area of a triangle is slightly different than finding the area of a parallelogram. To find the area of a triangle you do: ½ x base x perpendicular height. To find the area of a parallelogram you do: base x perpendicular height.

Practice questions:

1) Five Students are trying to find the area of the following triangle:

- Sameera thinks the answer is 48 cm2 because 6 x 8 = 48
- Bruce thinks the answer is 30 cm2 because 1/2 x 6 x 10 = 30
- Cassie thinks the answer is 24 cm2 because 6 + 8 +10 = 24
- Des thinks the answer is 40 cm2 because 1/2 x 8 x 10 = 40
- Elliot thinks the answer is 24 cm2 because ½ x 6 x 8 = 24

Who is correct? What mistakes have the other students made?